

74436

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

62263

SEARCH REQUEST FORM

Requestor's Name: Ana Woodward ^{4E10} Serial Number: 09/866059
 Date: 10/15/02 Phone: 308 2401 Art Unit: 1211

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

*Please search for a block copolymer of
 formula as shown on attachment.*

STAFF USE ONLY

Date completed: 10-18-02
 Searcher: EA
 Terminal time: 70
 Elapsed time: _____
 CPU time: _____
 Total time: 75
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Search Site
☒ STIC
☐ CM-1
☐ Pre-S
 Type of Search
☐ N.A. Sequence
☐ A.A. Sequence
☒ Structure (1)
☒ Bibliographic (an 1)

Vendors
☒ IG Suite
☒ STN #113.30
☐ Dialog
☐ APS
☐ Geninfo
☐ SDC
☐ DARC/Questel
☐ Other



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE#3/ELA
9/12/01

Inventor: David M. Schut

Group Art Unit: 1711

Serial No.: 09/866,059

Examiner: A. Woodward

Filed: May 25, 2001

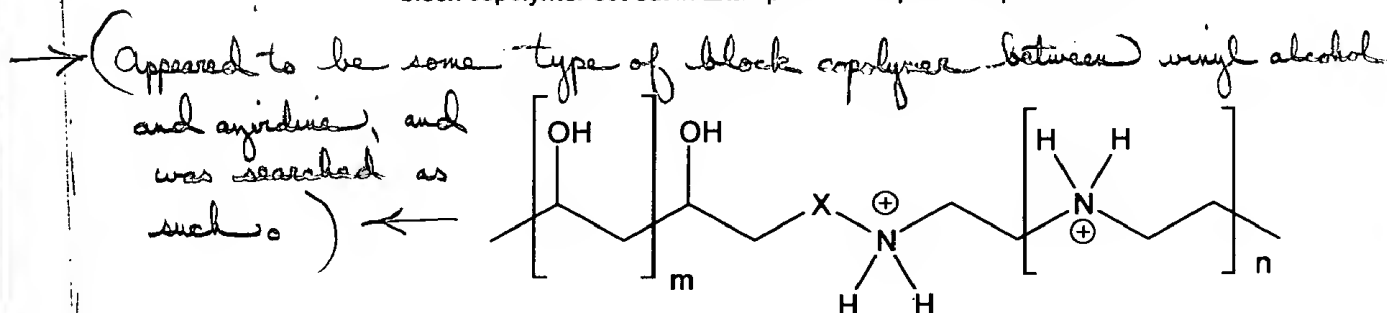
Title: UNDER-/OVERPRINTING FLUID COMPONENT FOR ENHANCING INK STABILITY IN PRINTING

Assistant Commissioner of Patents
Washington, D.C. 20231COPY OF PAPERS
ORIGINALLY FILEDRESPONSE TO RESTRICTION REQUIREMENT

Dear Sir:

This is a response to the Office Action of August 2, 2002 in the above-referenced application.

In response to the Examiner's requirement of an election of an ultimate species of block copolymer inclusive of specific first and second blocks, applicant elects the block copolymer set out in Example 1 of the present specification:



where m and n are both between 5 and 13, proving between 6 and 14 mers in each block, and X is an optional linker molecule, for example, a carbon atom or a polyethylene linker. The total molecular weight should be between 500-10,000.

RECEIVED
SEP 06 2002
TC 1700

Page 1 of 2

=> file reg
FILE 'REGISTRY' ENTERED AT 17:01:05 ON 18 OCT 2002
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STRUCTURE FILE UPDATES: 17 OCT 2002 HIGHEST RN 462599-37-7
DICTIONARY FILE UPDATES: 17 OCT 2002 HIGHEST RN 462599-37-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his

(FILE 'HOME' ENTERED AT 16:10:07 ON 18 OCT 2002)

L1 FILE 'HCAPLUS' ENTERED AT 16:10:39 ON 18 OCT 2002
14 S SCHUT D?/AU
SEL L1 2 RN

L2 FILE 'REGISTRY' ENTERED AT 16:14:37 ON 18 OCT 2002
3 S E1-E3

FILE 'HCAPLUS' ENTERED AT 16:15:39 ON 18 OCT 2002
SEL L1 1,3-14 RN

L3 FILE 'REGISTRY' ENTERED AT 16:16:05 ON 18 OCT 2002
116 S E4-E119
L4 2 S L3 AND PMS/CI
L5 1 S 9002-98-6
L6 1 S 9002-89-5

L7 FILE 'HCAPLUS' ENTERED AT 16:20:32 ON 18 OCT 2002
7551 S L5
L8 45232 S L6
L9 60005 S BLOCK? (2A) (POLYM? OR COPOLYM? OR TERPOLYM? OR RESIN? OR
L10 656 S L7 AND L8
L11 16 S L10 AND L9
L12 0 S L11 AND L1

FILE 'REGISTRY' ENTERED AT 16:21:23 ON 18 OCT 2002

L13 1438 S 151-56-4/CRN
L14 3807 S 557-75-5/CRN
L15 16 S L13 AND L14
L16 16 S L15 NOT 4<NC
L17 13 S L15 NOT 3<NC
L18 3 S L16 NOT L17
SEL L18 3 RN
L19 1 S E120

FILE 'HCAPLUS' ENTERED AT 16:28:58 ON 18 OCT 2002

L20 1 S L19

FILE 'REGISTRY' ENTERED AT 16:29:13 ON 18 OCT 2002

SEL L17 1,2,4,9,10,12,13 RN
L21 7 S E121-E127
SEL L17 11 RN
L22 1 S E128

FILE 'HCAPLUS' ENTERED AT 16:35:37 ON 18 OCT 2002

L23 13 S L21
L24 0 S L22
L25 0 S L20 AND L9
L26 2 S L23 AND L9
L27 27 S (L11 OR L20 OR L23) NOT L26

FILE 'REGISTRY' ENTERED AT 17:01:05 ON 18 OCT 2002

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 17:01:18 ON 18 OCT 2002
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FILE COVERS 1907 - 18 Oct 2002 VOL 137 ISS 17
FILE LAST UPDATED: 17 Oct 2002 (20021017/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please

check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d 126 1-2 ibib abs hitstr hitind

L26 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:297648 HCAPLUS
 DOCUMENT NUMBER: 134:321552
 TITLE: Polynucleotide-polymer complexes for cell transfection
 INVENTOR(S): Kabanov, Alexander V.; Alakov, Valery Y.; Vinogradov, Sergey V.
 PATENT ASSIGNEE(S): Supratek Pharma, Inc., Can.
 SOURCE: U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 912,968.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6221959	B1	20010424	US 1998-124943	19980730
US 5656611	A	19970812	US 1994-342209	19941118
US 6353055	B1	20020305	US 1997-912968	19970801
US 6359054	B1	20020319	US 1999-227364	19990108
US 6440743	B1	20020827	US 1999-320640	19990526
PRIORITY APPLN. INFO.:			US 1994-342209	A2 19941118
			US 1997-912968	A2 19970801
			US 1998-124943	A2 19980730

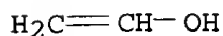
AB Compns. for stabilizing polynucleic acids and increasing the ability of polynucleic acids to cross cell membranes and act in the interior of a cell are disclosed. In one aspect, the invention provides a polynucleotide complex between a polynucleotide and certain polyether block copolymers. The polynucleotide complex can further include a polycationic polymer, as well as suitable targeting mols. and surfactants. The invention also provides a polynucleotide complex between a polynucleotide and a block copolymer comprising a polyether block and a polycation block. Thus, complexes of polymers of the invention and DNA were found to be resistant to nuclease digestion and to have an improved plasma half-life. These complexes improved transfection efficiency in a variety of cells, e.g., CHO, 3T3, MDCK, and Bacillus subtilis. An antisense oligonucleotide targeting MDR1 mRNA was introduced into SKVLB cells by this method. This procedure successfully reversed the cell's resistance to daunomycin.

IT 108166-37-6P, Aziridine-vinyl alcohol graft copolymer
 (polynucleotide-polymer complexes for cell transfection)
 RN 108166-37-6 HCAPLUS
 CN Ethenol, polymer with aziridine, graft (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

CRN 151-56-4

CMF C2 H5 N



IC C08G063-48

NCL 525054200

CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 35

ST transfection nucleic acid complex polyether polycation **block copolymer**IT 220570-99-0D, 1,4-Dibromobutane-N-(3-aminopropyl)-1,3-propanediamine-polyethylene glycol **block copolymer**, DNA complexes

(di- and triblock; polynucleotide-polymer complexes for cell transfection)

IT 181787-89-3DP, L-Lysine-polyethylene glycol **block copolymer**, DNA complexes

(diblock; polynucleotide-polymer complexes for cell transfection)

IT 288306-26-3D, Ethylene oxide-N-ethyl-4-vinylpyridinium bromide **block copolymer**, DNA complexes 335595-62-5D,L-Alanine-L-lysine-polyethylene glycol **block copolymer**, DNA complexes

(diblock; polynucleotide-polymer complexes for cell transfection)

IT 160796-34-9P, Aziridine-ethylene oxide **block copolymer**

(diblock; polynucleotide-polymer complexes for cell transfection)

IT 9002-98-6DP, Poly(ethylenimine), salts with carboxy-terminated vinyl polymers 9003-05-8DP, Polyacrylamide, carboxy-terminated, salts with poly(ethylenimine) 9003-39-8DP, Poly(vinylpyrrolidinone), carboxy-terminated, salts with poly(ethylenimine) 28902-82-1DP, Poly(N-acryloylmorpholine), carboxy-terminated, salts with poly(ethylenimine) 108166-37-6P, Aziridine-vinyl alcohol graft copolymer 111265-31-7P, Aziridine-ethylene oxide-propylene oxide **block graft copolymer** 116770-99-1P,

Aziridine-ethylene oxide graft copolymer 143073-46-5P, Ethylene oxide-L-lysine graft copolymer 151835-83-5P 220571-04-0P, N-(3-Aminopropyl)-1,3-propanediamine-1,4-dibromobutane copolymer 288306-29-6P 335595-66-9DP, N,N'-Bis(3-aminopropyl)-1,3-propanediamine-malonaldehyde copolymer, borohydride redn. products (polynucleotide-polymer complexes for cell transfection)
 IT 106392-12-5DP, Ethylene oxide-propylene oxide **block copolymer**, reaction product with oligonucleotides (triblock; polynucleotide-polymer complexes for cell transfection)

REFERENCE COUNT: 136 THERE ARE 136 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1999:113561 HCAPLUS
 DOCUMENT NUMBER: 130:187188
 TITLE: Polynucleotide compositions for drug delivery
 INVENTOR(S): Kabanov, Alexander V.; Alakov, Valery Y.; Vinogradov, Sergey V.
 PATENT ASSIGNEE(S): Supratek Pharma Inc., Can.
 SOURCE: PCT Int. Appl., 94 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

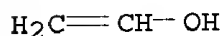
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9906055	A1	19990211	WO 1998-US16012	19980731
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6353055	B1	20020305	US 1997-912968	19970801
AU 9886806	A1	19990222	AU 1998-86806	19980731
EP 1003527	A1	20000531	EP 1998-938235	19980731
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRIORITY APPLN. INFO.:
 US 1997-912968 A 19970801
 US 1994-342209 A2 19941118
 WO 1998-US16012 W 19980731

AB Comps. for stabilizing polynucleic acids and increasing the ability of polynucleic acids to cross cell membranes and act in the interior of a cell. In one aspect, the invention provides a polynucleotide complex between a polynucleotide and certain polyether **block**

copolymers. The polynucleotide complex can further include a polycationic polymer, as well as suitable targeting mols. and surfactants. The invention also provides a polynucleotide complex between a polynucleotide and a **block copolymer** comprising a polyether block and a polycation block. A32P-labeled 17-mer (GGCTCCATTTCTTGCTC) complementary to the 10 transcription initiation site of the HIV-1 tat gene was utilized. A polynucleotide conjugate of the oligonucleotide was formed with a **block copolymer** of polyoxyethylene-poly(propyleneimine/butyleneimine). Male C57/B1/6 mice received 50 .mu.L i.v. injections of an anti-HIV conjugate or free anti-HIV, at 0.18 OD260/.mu.l dissolved in PBS. The plasma levels of the drug after 30 min were: 75% drug conjugate and 20% free drug.

IT 108166-37-6P
 (polynucleotide compns. for drug delivery)
 RN 108166-37-6 HCAPLUS
 CN Ethenol, polymer with aziridine, graft (9CI) (CA INDEX NAME)
 CM 1
 CRN 557-75-5
 CMF C2 H4 O



CM 2
 CRN 151-56-4
 CMF C2 H5 N



IC ICM A61K031-735
 ICS C07H021-04; C08F283-00; C08F293-00; C08L001-00; C08L071-02
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 1, 3, 37
 IT Ionene **polymers**
 Ionene **polymers**
 Polyamines
 Polyamines
 (polyoxyalkylene-, **block**; polynucleotide compns. for drug delivery)
 IT 220571-02-8DP, oxidized, **block polymers**
 220641-26-9DP, polymers with phosphonate polymer
 (polynucleotide compns. for drug delivery)

IT 108166-37-6P 121571-44-6P 220570-99-0P 220571-04-0P
220571-05-1P 220571-07-3P 220571-14-2P 220571-17-5P
220571-22-2P 220571-25-5P 220571-27-7P 220573-54-6P

(polynucleotide compns. for drug delivery)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

=> d 127 1-27 cbib abs hitstr hitind

L27 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2002 ACS

2002:736148 Document No. 137:253068 Flushable tampon applicators based
on polymer blends. Zhao, Jean Jianqun; Gilbertson, Gary Wayne;
Gray, Brian Francis; McAvoy, Drew Clifton; Quiram, Daniel Jonathan;
Wnuk, Andrew Julian (The Procter & Gamble Company, USA). PCT Int.
Appl. WO 2002074352 A1 20020926, 56 pp. DESIGNATED STATES: W: AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO,
CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ; RW: AT, BE, BF,
BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE,
IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English).
CODEN: PIXXD2. APPLICATION: WO 2002-US8052 20020315. PRIORITY: US
2001-810292 20010316; US 2001-944672 20010831.

AB Disclosed are flushable tampon applicators which comprise a
combination of thermoplastic materials and filler such as calcium
carbonate and talc, and which readily disintegrate in water such as
toilet water for improved disposal and reduced environmental
concerns regarding the destruction of these applicators. The
flushable tampon applicators comprise a combination of high mol. wt.
polyethylene oxides, low mol. wt. polyethylene glycols,
biodegradable polymers, and filler, wherein this combination of
water-dispersible thermoplastic polymers, biodegradable
thermoplastic polymers, and filler provide flushable tampon
applicators that are readily disposed of and that are smooth, soft,
flexible, and non-sticky or non-slimy to the touch before and during
use. For example, an injection molded thermoplastic compn. was a
blend of polyethylene glycol, Eastar 14766, calcium carbonate,
magnesium stearate, Plasthall 645 and DC 7051 (15:62:15:1:5:2).

IT 9002-89-5, Polyvinyl alcohol 9002-98-6,
Polyethylenimine

(flushable tampon applicators contg. polymer blends and fillers)

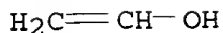
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9002-98-6 HCAPLUS
 CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4
 CMF C2 H5 N



IC ICM A61L015-62
 ICS A61F013-26
 CC 63-7 (Pharmaceuticals)
 Section cross-reference(s): 38
 IT 112-84-5, Kemamide E Ultra 9002-89-5, Polyvinyl alcohol
 9002-98-6, Polyethylenimine 9003-01-4, Polyacrylic acid
 9003-05-8, Polyacrylamide 9003-09-2, Poly(vinyl methyl ether)
 9003-11-6, Polyethylene oxide-polypropylene oxide copolymer
 9003-20-7, Polyvinyl acetate 9003-39-8, Polyvinylpyrrolidone
 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl
 cellulose 9004-65-3, Methyl hydroxypropyl cellulose 9005-25-8,
 Starch, biological studies 9011-16-9, Maleic anhydride-vinyl
 methyl ether copolymer 24980-41-4, Polycaprolactone 25067-34-9,
 Ethylene-vinyl alcohol copolymer 25087-26-7, Polymethacrylic acid
 25248-42-4, Polycaprolactone 25322-68-3, Polyethylene oxide
 25608-40-6, Polyaspartic acid 26009-03-0, Polyglycolide
 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26063-13-8,
 Polyaspartic acid 26100-51-6, Poly(lactic acid) 26202-08-4,
 Polyglycolide 26680-10-4, Polylactide 27517-34-6, Butylene
 oxide-ethylene oxide copolymer 60961-73-1, Eastar 14766
 67423-06-7, Bionolle 3001 107375-35-9, Diphenylmethane
 diisocyanate-ethylenediamine-poly(tetramethylene oxide)
block copolymer 400873-76-9, BAK 404
 (flushable tampon applicators contg. polymer blends and fillers)

L27 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2002 ACS
 2002:429429 Document No. 136:406937 Polymer-based lubricated catheter
 balloon. Yang, Dachuan; Sjoquist, Scott L.; Seppala, Jan D. (USA).
 U.S. Pat. Appl. Publ. US 20020068180 A1 20020606, 6 pp. (English).
 CODEN: USXXCO. APPLICATION: US 2000-727742 20001201.
 AB A dilatation balloon comprises an inner surface and an outer
 surface, the inner surface having a lubricious material disposed
 thereon to reduce friction or prevent adherence of adjacent layers,

and thus reduce the pressure required for inflation. The balloons are not limited to any particular any polymeric material, but may be formed of thermoplastic elastomers (i.e., **block copolymers**), polyolefins such as polyethylene and polypropylene, ethylene .alpha.-olefin polymers, polyesters, polyester elastomers, polyamides, and polyimides, etc. The lubricious material may be applied to the balloon by using a soln. of the lubricious material in solvent, and injecting the soln. through a tubular preform, or by spraying the preform prior to blowing the balloon. The lubricious material may also be coextruded with the tubular preform. The balloon or tubular preform may also be dipped in a soln. of the lubricious material. There are various other means of applying the lubricious material to the inner surface of the balloon material.

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6
(**polymer**-based lubricated catheter balloon)

RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O

$\text{H}_2\text{C}=\text{CH}-\text{OH}$

RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



IC ICM B05D003-10

NCL 428447000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

IT Synthetic rubber, biological studies

(azacyclotridecanone-polytetramethylene glycol, **block**;
polymer-based lubricated catheter balloon)

IT **Polymers**, biological studies

(**block**; **polymer**-based lubricated catheter
balloon)

- IT Polyester rubber
Synthetic rubber, biological studies
(butanediol-polytetramethylene glycol-terephthalic acid, **block; polymer**-based lubricated catheter balloon)
- IT Polyethers, biological studies
(polyamide-, **block; polymer**-based lubricated catheter balloon)
- IT Synthetic rubber, biological studies
(polyamide-polyether, **block; polymer**-based lubricated catheter balloon)
- IT Polyamides, biological studies
(polyether-, **block; polymer**-based lubricated catheter balloon)
- IT 74-85-1D, Ethylene, polymers with .alpha.-olefins 79-06-1D, Acrylamide, derivs., polymers 79-06-1D, Acrylamide, polymers 79-10-7D, Acrylic acid, esters, polymers 79-10-7D, Acrylic acid, polymers 79-39-0D, MethAcrylamide, polymers 79-41-4D, MethAcrylic acid, esters, polymers 79-41-4D, Methacrylic acid, polymers 108-31-6D, Maleic anhydride, copolymers 110-16-7D, Maleic acid, copolymers 110-16-7D, Maleic acid, polymers 110-17-8D, Fumaric acid, polymers 9000-11-7, Carboxymethyl cellulose 9002-86-2, Polyvinyl chloride **9002-89-5**, Poly(vinyl alcohol) **9002-98-6** 9003-05-8, Polyacrylamide 9003-39-8, Poly(vinylpyrrolidone) 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-54-0D, Dextran, derivs. 9004-67-5, Methyl cellulose 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulphate 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 9016-00-6, Polydimethylsiloxane 9078-96-0, Surlyn 25038-59-9, Polyethylene terephthalate, biological studies 25322-68-3, Polyethylene glycol 26101-52-0, Polyvinylsulfonic acid 31900-57-9, Polydimethylsiloxane 106392-12-5, Ethylene oxide/propylene oxide **block copolymer**
(**polymer**-based lubricated catheter balloon)

L27 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2002 ACS

2002:71778 Document No. 136:123748 Methods and apparatus for delivering a volatile component via a controlled exothermic reaction. Li, Yu-jun; Mao, Mark Hsiang-kuen; Tamura, Haruo (Procter and Gamble Company, USA). PCT Int. Appl. WO 2002005620 A2 20020124, 33 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US19080 20000713.

AB Reaction mixts. that include exothermic generating particles having

a water sol. coating encasing a portion of the particles, a volatile component and, optionally an aq. soln., and a buffer are disclosed. The reaction mixts. are esp. suited to generate heat in a controlled manner. In one such controlled reaction, the reaction components are mixed together and the mixt. increases in temp. to a set temp. within a predetd. time, and the mixt. remains at the set temp. for a longer period of time. In this manner, volatile components can be controllably released to the surrounding environment. The volatile components can be, e.g., a perfume, a fragrance, an insect repellent, a fumigant, a disinfectant, a bactericide, an insecticide, a pesticide, a germicide, an acaricide, a sterilizer, a deodorant, a fogging agent and mixt. of these. Apparatuses and methods that use these reaction mixts. are also disclosed. Exothermic generating particles are coated with PEG as follows. A premix is made by combining magnesium powder and anhyd. citric acid (1:6.5), and then a fragrant oil is added to this premix. The premix is then added into melted PEG. The melted PEG is a mixt. of 3 different mol. wts., PEG 600, PEG 1000, and PEG 2000. The melted PEG mixt. is around 50.degree.. The mixt. is then cooled to for 10 min to approx. 20-25.degree.. The product comprises PEG of 3 different mol. wts., a fragrant oil, magnesium powder and anhyd. citric acid powder, and is a gel with suspended particles.

IT 9002-89-5, Polyvinyl alcohol 9002-98-6
 (app. for delivering volatile components via controlled exothermic reaction)
 RN 9002-89-5 HCAPLUS
 CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5
 CMF C2 H4 O

$\text{H}_2\text{C}=\text{CH}-\text{OH}$

RN 9002-98-6 HCAPLUS
 CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4
 CMF C2 H5 N



ICI A61

CC 63-8 (Pharmaceuticals)
 Section cross-reference(s): 5, 62

IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 56-65-5, Adenosine triphosphate, biological studies 56-84-8, Aspartic acid, biological studies 56-86-0, Glutamic acid, biological studies 59-67-6, Nicotinic acid, biological studies 60-12-8, .beta.-Phenylethyl alcohol 64-18-6, Formic acid, biological studies 64-19-7, Acetic acid, biological studies 65-85-0, Benzoic acid, biological studies 69-72-7, Salicylic acid, biological studies 76-22-2, Camphor 77-92-9, Citric acid, biological studies 78-70-6, Linalool 79-09-4, Propanoic acid, biological studies 79-10-7D, Acrylic acid, polymers 79-14-1, Glycolic acid, biological studies 79-41-4D, Methacrylic acid, derivs., copolymers 80-69-3, Tartronic acid 81-15-2, Musk xylol 87-69-4, Tartaric acid, biological studies 88-99-3, Phthalic acid, biological studies 90-64-2, Mandelic acid 91-20-3D, Naphthalene, derivs. 93-08-3, Methyl .beta.-naphthyl ketone 93-15-2, Methyl eugenol 93-92-5, Methylphenylcarbinyl acetate 97-53-0, Eugenol 97-54-1, Isoeugenol 98-11-3, Benzenesulfonic acid, biological studies 98-79-3, Pyrrolidonecarboxylic acid 98-86-2, Acetophenone, biological studies 100-21-0, Terephthalic acid, biological studies 100-51-6, Benzyl alcohol, biological studies 101-86-0, .alpha.-Hexylcinnamic aldehyde 103-36-6, Ethyl cinnamate 103-54-8, Cinnamyl acetate 103-82-2, Phenylacetic acid, biological studies 103-95-7, Cyclamen aldehyde 104-15-4, Toluenesulfonic acid, biological studies 104-46-1, Anethole 104-54-1, Cinnamyl alcohol 104-61-0, .gamma.-Nonalactone 104-67-6, .gamma.-Undecalactone 105-54-4, Ethyl butyrate 106-23-0, Citronellal 106-24-1, Geraniol 107-75-5, Hydroxycitronellal 107-92-6, Butyric acid, biological studies 109-52-4, Valeric acid, biological studies 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 110-38-3, Ethyl caprate 110-44-1, Sorbic acid 110-94-1, Glutaric acid 111-16-0, Pimelic acid 112-30-1, Decanol 115-95-7, Linalyl acetate 116-02-9, 3,3,5-Trimethylcyclohexanol 120-72-9, Indole, biological studies 121-32-4, Ethyl vanillin 121-33-5, Vanillin 121-91-5, Isophthalic acid, biological studies 122-00-9, p-Methylacetophenone 122-03-2, Cumin aldehyde 122-40-7 122-63-4, Benzyl propionate 123-11-5, Anisaldehyde, biological studies 123-92-2, Isoamyl acetate 124-04-9, Adipic acid, biological studies 134-20-3, Methyl anthranilate 140-11-4, Benzyl acetate 141-82-2, Malonic acid, biological studies 144-62-7, Oxalic acid, biological studies 149-91-7, Gallic acid, biological studies 473-81-4, Glyceric acid 487-79-6, Kainic acid 507-70-0, Borneol 526-95-4, Gluconic acid 528-44-9, Trimellitic acid 552-63-6, Tropic acid 600-15-7, .alpha.-Hydroxybutyric acid 621-82-9, Cinnamic acid, biological studies 627-83-8, Ethylene glycol distearate 659-70-1, Isoamyl isovalerate 1304-56-9, Beryllium oxide, biological studies 1305-78-8, Calcium oxide, biological studies 1327-43-1, Aluminum magnesium silicate 1330-43-4, Sodium tetraborate 1337-83-3, Undecenal 1405-86-3,

Glycyrrhizic acid 1490-04-6, Menthhol 2466-09-3, Pyrophosphoric acid 2630-39-9, Methyl dihydrojasmonate 5329-14-6, Sulfamic acid 5392-40-5, Citral 6915-15-7, Malic acid 7429-90-5D, Aluminum, compds. 7439-89-6D, Iron, compds. 7439-93-2D, Lithium, compds. 7439-95-4D, Magnesium, compds. 7440-09-7D, Potassium, compds. 7440-23-5D, Sodium, compds. 7440-41-7D, Beryllium, compds. 7440-50-8D, Copper, compds. 7440-66-6D, Zinc, compds. 7440-70-2D, Calcium, compds. 7487-88-9, Magnesium sulfate, biological studies 7558-80-7, Sodium dihydrogen phosphate 7631-86-9, Silica, biological studies 7631-90-5, Sodium hydrogen sulfite 7632-05-5, Sodium phosphate 7664-38-2, Phosphoric acid, biological studies 7727-15-3, Aluminum bromide 7773-03-7, Potassium hydrogen sulfite 7778-77-0, Potassium dihydrogen phosphate 7784-23-8, Aluminum iodide 7786-30-3, Magnesium chloride, biological studies 7789-78-8, Calcium hydride 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Gum guar 9000-36-6, Karaya gum 9000-40-2, Carob seed gum 9000-65-1, Gum tragacanth 9000-69-5, Pectin 9002-18-0, Agar 9002-89-5, Polyvinyl alcohol 9002-98-6 9003-04-7, Sodium polyacrylate 9003-05-8, Polyacrylamide 9003-09-2, Poly(vinyl methyl ether) 9003-32-1, Polyethyl acrylate 9003-39-8, Polyvinylpyrrolidone 9004-32-4, Sodium carboxymethyl cellulose 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Methyl hydroxypropyl cellulose 9004-67-5, Methyl cellulose 9004-70-0, Nitro cellulose 9005-22-5, Sodium cellulose sulfate 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-37-2, Propylene glycol alginate 9005-38-3, Sodium alginate 9011-85-2, Quince seed gum 9014-37-3 9037-55-2, Galactan 9057-02-7, Pullulan 9057-06-1, Carboxymethyl starch 11138-66-2, Xanthan gum 12136-45-7, Potassium oxide, biological studies 12173-47-6, Hectorite 13327-32-7, Beryllium hydroxide 14691-80-6 16270-76-1 16853-85-3, Lithium aluminum hydride 25322-68-3 25763-86-4, Sodium hydrogen pyrosulfite 26913-06-4, Poly[imino(1,2-ethanediyl)] 53563-67-0D, Dimethylindane, derivs. 57856-81-2, Allyl caprate 61970-00-1, Firefly luciferase 106392-12-5, Polyethylene glycol-polypropylene glycol **block copolymer** 111937-70-3, Hydroxyacrylic acid 141533-39-3, 2-Hydroxypropyl methyl starch 179616-26-3, Beryllium oxide monohydrate
(app. for delivering volatile components via controlled exothermic reaction)

L27 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2002 ACS
2001:194666 Document No. 134:245249 Original plates for lithography and manufacture of lithographic plates using the same. Inno, Norifumi; Tachikawa, Hiromichi (Fuji Photo Film Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001071452 A2 20010321, 14 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-39696 20000217. PRIORITY: JP 1999-190785 19990705.
AB The original plates comprise supports having thereon (A)

ink-accepting photothermal converter layers contg. compds. which convert laser light to heat and (B) cured hydrophilic layers, wherein a part of A reside at the laser light-exposed sites. The process involves heat mode imagewise exposure of the original plates to laser light, followed with stripping B at the irradiated sites. The invention provides original plates having good plate wear and being capable of short-time imagewise scanning exposure to laser light and can be used for platemaking with or without water development or for computer-to-plate platemaking.

IT

330438-51-2P

(photothermal converter layer contg.; original plates with photothermal converter layers and hydrophilic layers for lithog. plates)

RN

330438-51-2 HCAPLUS

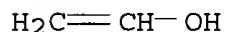
CN

Ethanedial, polymer with aziridine and ethenol (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

CRN 151-56-4

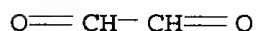
CMF C2 H5 N



CM 3

CRN 107-22-2

CMF C2 H2 O2



IC

ICM B41C001-055

ICS G03F007-00

CC

74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 101-68-8DP, MDI, reaction products with butyral resins, 111-40-0P, Diethylenetriamine 531-18-0DP, Hexamethylolmelamine, reaction products with novolaks, 1760-24-3P 17927-72-9DP, AKT 855, reaction products with cresol novolak resin and urethane rubber 17927-72-9P, AKT 855 26098-32-8P 53192-53-3P 65431-19-8DP, Sumilit PR 50904, reaction products with urethane rubber and titanium diisopropoxide bis(2,4-pentadionate) 80833-81-4P 201054-35-5P **330438-51-2P**
 (photothermal converter layer contg.; original plates with photothermal converter layers and hydrophilic layers for lithog. plates)

L27 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2002 ACS

2000:842029 Document No. 134:21505 Lubricious coating for medical devices. Yang, Dachuan; Wang, Lixiao; Stanslaski, Joel; Tang, Liguang (Scimed Life Systems, Inc., USA). PCT Int. Appl. WO 2000071181 A1 20001130, 26 pp. DESIGNATED STATES: W: CA, JP; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US3431 20000209. PRIORITY: US 1999-316502 19990521.

AB The present invention relates to a medical device for insertion into the body wherein the device has at least one surface which periodically comes into contact with a second surface. The first surface comprises an improved lubricious coating having a first hydrogel layer and a second hydrophobic top coating which prevents the hydrogel coating from prematurely absorbing too much moisture. The hydrophobic top coating comprises at least one hydrophilic surfactant which acts as a carrier to facilitate removal of the hydrophobic top coating upon entry into an aq. environment. A balloon for angioplasty was coated with a high mol. wt. polyethylene oxide, followed with a soln. of polydimethylsiloxane and Pluronic 31 in isopropanol/heptane solvent. The balloon was placed into a protector and sterilized with ethylene oxide.

IT **9002-89-5**, Polyvinyl alcohol **9002-98-6**
 (medical devices coated with hydrogels and hydrophobic polysiloxanes)

RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



IC ICM A61L029-08

ICS A61L029-14

CC 63-7 (Pharmaceuticals)

IT 9002-89-5, Polyvinyl alcohol 9002-98-6

9003-01-4, Polyacrylic acid 9003-39-8, PVP 9004-32-4,

Carboxymethyl cellulose 9004-54-0, Dextran, biological studies

9004-67-5, Methyl cellulose 9005-49-6, Heparin, biological studies

9007-28-7, Chondroitin sulfate 9016-00-6, Dimethylsilanediol

homopolymer sru 25153-40-6, Methyl vinyl ether-maleic acid

copolymer 25322-68-3, Polyethylene oxide 26101-52-0,

Polyvinylsulfonic acid 31900-57-9, Dimethylsilanediol homopolymer

106392-12-5, Ethylene oxide-propylene oxide **block****copolymer**

(medical devices coated with hydrogels and hydrophobic polysiloxanes)

L27 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2002 ACS

2000:835308 Document No. 134:18484 Modified poly(vinyl alcohol)-type fiber and immobilization carrier of microorganism. Nagashima, Ichiro; Kobayashi, Hisanori; Sugihara, Toshio; Suzuki, Mitsuo (Nichibi K. K., Japan; Life Energy Kogyo Co., Ltd.). Jpn. Kokai Tokkyo Koho JP 2000328356 A2 20001128, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-140587 19990520.

AB The fiber contains 5-40% polyamine and/or polycarboxylic acid-type polymers and preferably 0.01-10% tourmaline microparticles and is heat-treated. Melt dissolving poly(vinyl alc.) 27.7, polyethyleneimine (PEI-210T) 10.3, and water 62 parts, spinning by a dry method, drawing 5 folds, heat treating at 225.degree., and crosslinking with ethylene glycol diglycidyl ether (Epiol E100) at 80.degree. for 3 h gave a water resistant modified vinyl fiber. Needle punching a web contg. 70% this fiber (as carded yarn) and 30% low melting polyester fiber and hot pressing gave a 500 g/m2 10-mm thick nonwoven fabric, useful for microorganism immobilization.

IT 309729-27-9, Aziridine-vinyl alcohol-ethylene glycol diglycidyl ether copolymer

(fiber; modified poly(vinyl alc.)-type fiber and immobilization carrier of microorganism)

RN 309729-27-9 HCAPLUS

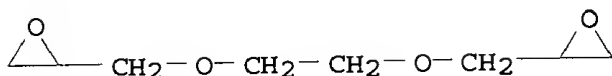
CN Ethenol, polymer with aziridine and 2,2'-[1,2-

ethanediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 2224-15-9

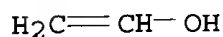
CMF C8 H14 O4



CM 2

CRN 557-75-5

CMF C2 H4 O



CM 3

CRN 151-56-4

CMF C2 H5 N



IC ICM D01F006-50

ICS C12N011-08; D01F001-10

CC 40-2 (Textiles and Fibers)

Section cross-reference(s): 60, 61

IT 26299-60-5D, formals 309729-27-9, Aziridine-vinyl

alcohol-ethylene glycol diglycidyl ether copolymer 309729-28-0,
 Vinyl alcohol-allylamine-glutaraldehyde-ethylene glycol diglycidyl
 ether copolymer

(fiber; modified poly(vinyl alc.)-type fiber and immobilization
 carrier of microorganism)

L27 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1998:777284 Document No. 130:125956 Membrane Potential across a High
 Water Content Anion-Exchange Membrane Separating Two Solutions with
 a Common Counterion but Two Different Co-ions. Tasaka, Masayasu;
 Kiyono, Ryotaro; Yoo, Dong-Suk (Department of Material Science and
 Engineering Graduate School of Science and Technology, Shinshu
 University, Wakasato Nagano, 380-8553, Japan). Journal of Physical
 Chemistry B, 103(1), 173-177 (English) 1999. CODEN: JPCBFK. ISSN:

- 1089-5647. Publisher: American Chemical Society.
- AB A theory for bi-ionic potential, esp. for bi-co-ionic potential, which is a p.d. across a membrane due to the difference in co-ions, is proposed. A high water content interpolymer membrane of poly(ethyleneimine) and poly(vinyl alc.) was prepd. as a low-charged anion-exchange membrane. The p.d. .DELTA..psi. for the system of KCl/membrane/1/2MgCl₂ or 1/2CaCl₂ was measured by changing the external electrolyte concns. cs and analyzed according to the theory. The bi-co-ionic potential .DELTA..psi. increased with increasing cs at low concns., and after the potential .DELTA..psi. reached a max. value, the potential .DELTA..psi. decreased with increasing cs at high concns.; i.e., a bell-shaped dependence of .DELTA..psi. was obsd. against cs. This is because the low mobility of co-ions with charge no. +2 in the charged membranes increases with increasing cs and finally reaches the mobility in the free electrolyte solns.
- IT 186380-33-6, Poly(vinyl alcohol)-polyethylenimine complex (membrane potential across a high-water-content anion-exchange membrane sepg. two solns. with a common counterion but two different Co-ions)
- RN 186380-33-6 HCAPLUS
- CN Ethenol, homopolymer, compd. with aziridine homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 9002-98-6
CMF (C2 H5 N)x
CCI PMS

CM 2

CRN 151-56-4
CMF C2 H5 N

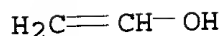


CM 3

CRN 9002-89-5
CMF (C2 H4 O)x
CCI PMS

CM 4

CRN 557-75-5
CMF C2 H4 O



CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6 26913-06-4,
Poly[imino(1,2-ethanediyl)] 186380-33-6, Poly(vinyl
alcohol)-polyethylenimine complex
(membrane potential across a high-water-content anion-exchange
membrane sepg. two solns. with a common counterion but two
different Co-ions)

L27 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1998:58851 Document No. 128:129353 Coated papers with hydrophobic
barrier layers and image receiving coatings. Malhotra, Shadi L.
(Xerox Corp., USA). U.S. US 5709976 A 19980120, 20 pp. (English).
CODEN: USXXAM. APPLICATION: US 1996-656814 19960603.

AB Coated paper comprises (a) a substrate; (b) a hydrophobic barrier
layer comprised of a water insol. component and a water or alc. sol.
anticurl agent, the hydrophobic barrier layer being present on both
sides of the substrate; (c) image receiving coatings situated on the
top of both hydrophobic barrier layers, the image receiving coatings
being suitable for receiving images of an aq. ink, the coatings
comprising (1) a polymeric binder, (2) a dye fixative, (3) a filler,
(4) a lightfastness inducing agent, and (5) a biocide. The coated
papers are also suitable for receiving images developed with
electrostatic toner compns. where the coatings comprise (1) a
polymeric binder, (2) an antistatic agent, (3) a lightfastness
inducing agent, (4) a pigment, and (5) an optional biocide.

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6
(coated papers with hydrophobic barrier layers and image
receiving coatings)

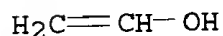
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



IC ICM B41M005-00
ICS B41J002-01

NCL 430124000

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 74

IT 58-95-7, Vitamin E acetate 59-47-2 60-12-8, Phenethyl alcohol
64-19-7D, Acetic acid, coco fatty acid derivs., uses 64-20-0,
Tetramethyl ammonium bromide 77-93-0, Triethyl citrate 77-99-6
78-21-7 78-66-0, 3,6-Dimethyl-4-octyne-3,6-diol 81-13-0,
Pantothenol 93-56-1, 1-Phenyl-1,2-ethanediol 102-71-6, uses
102-79-4, N-Butyl diethanolamine 105-59-9, N-Methyl diethanolamine
109-16-0 110-30-5 110-31-6 112-03-8, Stearyl trimethyl
ammonium chloride 112-84-5, Erucamide 115-84-4,
2-Butyl-2-ethyl-1,3-propanediol 120-07-0, N-Phenyl diethanolamine
122-96-3, 1-4-Bis(2-hydroxyethyl)piperazine 123-34-2,
3-Allyloxy-1,2-propanediol 124-26-5, Stearamide 126-86-3,
2,4,7,9-Tetramethyl-5-decyne-4,7-diol 131-54-4,
2,2'-Dihydroxy-4,4'-dimethoxy benzophenone 131-57-7,
2-Hydroxy-4-methoxy benzophenone 136-36-7, Resorcinol mono
benzoate 136-44-7, Glycerol p-amino benzoate 139-87-7, N-Ethyl
diethanolamine 144-19-4, 2,2,4-Trimethyl-1,3-pentanediol
300-92-5, Aluminum distearate 301-02-0, Oleamide 471-34-1,
Calcium carbonate, uses 538-43-2, 3-Phenoxy-1,2-propanediol
539-48-0, p-Xylylene diamine 541-22-0, Decamethylene bis trimethyl
ammonium bromide 544-62-7, 3-Octadecyloxy-1,2-propanediol
546-93-0, Magnesium carbonate 557-04-0, Magnesium stearate
557-05-1, Zinc stearate 616-30-8, 3-Amino-1,2-propanediol
621-56-7, 3-(Diethylamino)-1,2-propanediol 623-39-2,
3-Methoxy-1,2-propanediol 657-84-1, Sodium toluene sulfonate
822-16-2, Sodium stearate 1116-76-3, Trioctylamine 1119-97-7,
Myristyl trimethyl ammonium bromide 1300-72-7, Sodium xylene
sulfonate 1309-48-4, Magnesium oxide, uses 1314-13-2, Zinc
oxide, uses 1314-98-3, Zinc sulfide, uses 1327-33-9, Antimony
oxide 1327-43-1, Magnesium aluminum silicate 1344-95-2, Calcium
silicate 1406-18-4, Vitamin E 1455-42-1 1530-32-1, Ethyl
triphenyl phosphonium bromide 1530-45-6, Carbethoxymethyl
triphenyl phosphonium bromide 1592-23-0, Calcium stearate
1606-85-5, 1,4-Bis(2-hydroxyethoxy)-2-butyne 1843-05-6,
2-Hydroxy-4-(octyloxy)benzophenone 1874-62-0, 3-Ethoxy-1,2-
propanediol 2065-67-0, Tetra phenyl phosphonium iodide
2380-78-1, Homovanillyl alcohol 2390-68-3, Didecyl dimethyl
ammonium bromide 2440-22-4, 2-(2'-Hydroxy-5'-
methylphenyl)benzotriazole 2549-87-3, 4-Allyloxy-2-
hydroxybenzophenone 2985-59-3, 2-Hydroxy-4-dodecyloxy benzophenone

3061-75-4, Behenamide 3290-92-4 3433-37-2, 2-Piperidine methanol
 3864-99-1 4217-66-7, 2-Phenyl-1,2-propanediol 4704-94-3,
 2-(Hydroxymethyl)-1,3-propanediol 4762-26-9, Hexyl triphenyl
 phosphonium bromide 4847-93-2, 3-Piperidino-1,2-propanediol
 5350-96-9, 4-Nitrobenzyl trimethyl ammonium chloride 6425-32-7,
 3-Morpholino-1,2-propanediol 6712-98-7 6834-92-0, Sodium
 metasilicate 6969-49-9, Octyl salicylate 7173-51-5, Didecyl
 dimethyl ammonium chloride 7237-34-5, 2-Hydroxyethyl triphenyl
 phosphonium bromide 7727-43-7, Barium sulfate 7789-75-5, Calcium
 fluoride, uses 9000-01-5, Gum arabic 9000-07-1, Carrageenan
 9000-36-6, Karaya gum 9002-18-0, Agar-agar 9002-86-2, Vinyl
 chloride homopolymer 9002-89-5, Poly(vinyl alcohol)
 9002-98-6 9003-05-8, Poly(acrylamide) 9003-06-9
 9003-08-1, Melamine-formaldehyde resin 9003-11-6 9003-18-3,
 Butadiene-acrylonitrile copolymer 9003-20-7, Polyvinyl acetate
 9003-20-7D, Vinyl acetate homopolymer, carboxylated 9003-39-8,
 Poly(vinyl pyrrolidone) 9003-53-6, Polystyrene 9003-55-8,
 Styrene-butadiene copolymer 9003-56-9, Butadiene-acrylonitrile-
 styrene terpolymer 9004-32-4, Sodium carboxymethyl cellulose
 9004-58-4, Ethyl hydroxyethyl cellulose 9004-62-0, Hydroxyethyl
 cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3,
 Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose
 9005-22-5, Sodium cellulose sulfate 9005-25-8, Starch, uses
 9005-27-0, Hydroxyethyl starch 9006-26-2, Ethylene-maleic
 anhydride copolymer 9006-65-9D, Dimethicone, behenoxy
 9006-65-9D, Dimethicone, cetyl 9006-65-9D, Dimethicone, stearoxy
 9011-05-6, Urea-formaldehyde resin 9011-13-6 9011-16-9, Vinyl
 methyl ether-maleic anhydride copolymer 9012-76-4, Chitosan
 9013-34-7, Diethyl aminoethyl cellulose 9015-11-6, Benzyl
 cellulose 9015-73-0, Diethyl aminoethyl dextran 9032-42-2,
 Hydroxyethyl methyl cellulose 9033-69-6, Amino deoxycellulose
 9036-94-6, Chlorodeoxycellulose 9041-56-9, Hydroxy butylmethyl
 cellulose 9044-05-7, Carboxymethyl dextran 9049-76-7,
 Hydroxypropyl starch 9051-49-4, Propoxylated pentaerythritol
 9088-04-4, Sodium carboxymethylhydroxyethyl cellulose 10094-45-8,
 Stearyl erucamide 10213-79-3, Sodium metasilicate pentahydrate
 10353-86-3 11138-66-2, Xanthan 12001-79-5, Vitamin K
 12047-27-7, Barium titanate, uses 13276-08-9, Stearyl stearamide
 13349-82-1, 1-[2-(2-Hydroxyethoxy)ethyl]-piperazine 13463-67-7,
 Titanium dioxide, uses 13927-77-0, Nickel dibutyldithiocarbamate
 14690-00-7, 2-Benzyloxy-1,3-propanediol 15625-89-5,
 Trimethylolpropane triacrylate 16106-44-8, Potassium toluene
 sulfonate 16260-09-6, Oleyl palmitamide 16432-81-8,
 2-(4-Benzoyl-3-hydroxyphenoxy)ethylacrylate 16841-14-8
 17131-52-1, 3-(4-Methoxy phenoxy)-1,2-propanediol 21645-51-2,
 Hydrated alumina, uses 24969-10-6, Epichlorohydrin-ethylene oxide
 copolymer 25037-78-9, Ethylene-vinyl chloride copolymer
 25086-29-7 25086-89-9, Vinyl pyrrolidone-vinyl acetate copolymer
 25153-40-6, Vinylmethylether-maleic acid copolymer 25213-24-5,
 Vinyl alcohol-vinyl acetate copolymer 25322-68-3 25791-96-2
 25805-17-8, Poly(2-ethyl-2-oxazoline) 26336-38-9, Poly(vinylamine)
 26447-10-9, Ammonium xylene sulfonate 26793-34-0,

Poly(N,N-dimethyl acrylamide) 27119-07-9, Poly(2-acrylamide-2-methyl propane sulfonic acid) 27676-62-6 28132-01-6,
 4-8-Bis(hydroxymethyl)tricyclo[5.2.1.0^{2.6}]decane 28265-35-2,
 Butadiene-maleic acid copolymer 28728-55-4, 1,5-Dimethyl-1,5-diaza undecamethylene polymethobromide 28961-43-5, Trimethylolpropane ethoxylate triacrylate 29690-74-2, Poly(vinyl phosphate) 29963-76-6, Poly[2-(4-benzoyl-3-hydroxyphenoxy)ethylacrylate] 30346-73-7, Potassium xylene sulfonate 30947-30-9 32073-22-6, Sodium cumene sulfonate 33950-46-8 36729-43-8 36936-60-4, Ethoxylated triethanolamine 37293-51-9, Amino dextran 37337-45-4 37767-39-8, Tetra sodium N-(1,2-dicarboxyethyl)-N-octadecyl sulfosuccinamate 39454-79-0, Carboxymethyl hydroxypropyl guar 40817-03-6, p-Xylylene bis(triphenyl phosphonium bromide) 42503-45-7 47525-34-8D, salts 50586-59-9, Ethoxylated trimethylolpropane 51331-09-0, Hydroxypropyl hydroxyethyl cellulose 51811-79-1 52479-58-0 53879-54-2, Trimethylolpropane propoxylate triacrylate 54351-50-7 58205-99-5, Ethylene oxide-propylene oxide copolymer pentaerythritol ether 60278-98-0 63462-99-7, Tetra octadecyl ammonium bromide 64022-61-3 65816-20-8 67845-93-6, Hexadecyl 3,5-di-tert-butyl-4-hydroxybenzoate 70321-86-7 70340-04-4, 2-Hydroxybenzyl triphenyl phosphonium bromide 71029-16-8 79720-19-7 82451-48-7 82973-76-0 85391-19-1, 3-Pyrrolidino-1,2-propanediol 85721-30-8 87075-61-4, Erucyl erucamide 95548-49-5 96352-14-6, Phenyl cellulose 103597-45-1 105287-89-6 106158-22-9 106917-30-0 106917-31-1 107498-00-0, Ethylene oxide-propylene oxide **block copolymer** glycerol ether 113277-70-6, Poly(N,N-dimethyl-3,5-dimethylene piperidinium chloride) 117172-48-2 121786-16-1, Ethylene oxide-vinyl alcohol graft copolymer 122269-49-2, Ethylene oxide-isoprene **block copolymer** 136462-13-0 137053-35-1 139011-48-6, (Diethylamino)methyl methacrylate-vinyl pyrrolidone copolymer 145332-37-2, Ethylene oxide-2-hydroxyethyl methacrylate **block copolymer** 146346-92-1, 4-Butoxybenzyl triphenyl phosphonium bromide 151626-65-2 156309-05-6, Dimethylsilanediol-ethylene oxide-propylene oxide **block copolymer** 200715-29-3 200960-22-1 201798-70-1 201798-71-2 201816-44-6
 (coated papers with hydrophobic barrier layers and image receiving coatings)

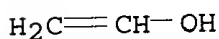
- L27 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2002 ACS
 1997:491597 Document No. 127:110023 Multilayered polymeric material, method for producing, and applications. Hoerner, Pierre; Riess, Gerard; Busnel, Rene Guy; Cheymol, Andre (Hutchinson, Fr.). Eur. Pat. Appl. EP 780223 A2 19970625, 22 pp. DESIGNATED STATES: R: BE, DE, ES, FR, GB, IT, LU, NL, SE. (French). CODEN: EPXXDW. APPLICATION: EP 1996-402819 19961219. PRIORITY: FR 1995-15166 19951220.
 AB The title multilayer material comprises .gtoreq.1 layer comprising a (non)reversible gel contg. .gtoreq.1 chem. active substance (e.g., biocides), and .gtoreq.2 barrier layers comprising synthetic

rubbers, and the layers are joined by incorporation of an adhesive in either of the layers or through independent adhesive layers. The materials are useful as, e.g., gloves. A trilayer material was prepd. from a gel layer prepd. from Mowiol 26-88 dissolved in H₂O/polyethylene glycol and contg. Bardac 2270E and barrier layers prepd. from isoprene rubber dissolved in cyclohexane.

IT 9002-89-5, Mowiol 26-88 9002-98-6,
Polyethylenimine
(multilayered polymeric material, method for producing, and applications)
RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5
CMF C2 H4 O



RN 9002-98-6 HCAPLUS
CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

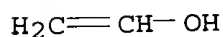
CM 1

CRN 151-56-4
CMF C2 H5 N



IC ICM B32B009-04
ICS B32B025-04
CC 38-3 (Plastics Fabrication and Uses)
IT Isoprene-styrene rubber
Styrene-butadiene rubber, uses
(**block**; multilayered **polymeric** material,
method for producing, and applications)
IT Styrene-butadiene rubber, uses
(hydrogenated, **block**; multilayered **polymeric**
material, method for producing, and applications)
IT 105729-79-1
(isoprene-styrene rubber, **block**; multilayered
polymeric material, method for producing, and
applications)
IT 9002-89-5, Mowiol 26-88 9002-98-6,
Polyethylenimine 9003-01-4, Polyacrylic acid 9003-05-8,

- Polyacrylamide 9003-09-2, Poly(vinyl methyl ether) 9003-39-8,
Polyvinyl pyrrolidone 9016-00-6, Polydimethyl siloxane
31900-57-9, Polydimethyl siloxane 124423-64-9
(multilayered polymeric material, method for producing, and
applications)
- IT 106107-54-4
(styrene-butadiene rubber, **block**; multilayered
polymeric material, method for producing, and
applications)
- IT 9003-55-8
(styrene-butadiene rubber, hydrogenated, **block**;
multilayered **polymeric** material, method for producing,
and applications)
- L27 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2002 ACS
1997:90285 Document No. 126:108917 Plaster bases containing polymer
powders dispersed in rubber adhesives, manufacture of the plaster
bases, and topical adhesive preparations using them. Mori, Masao
(Riido Kemikaru Kk, Japan). Jpn. Kokai Tokkyo Koho JP 08295624 A2
19961112 Heisei, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
1995-126001 19950426.
- AB The plaster bases are manufd. by (1) dispersing water-absorbing
resin powders and/or water-insol. rubbers in adhesives contg.
adhesive rubber components, tackifiers, and plasticizers and (2)
spreading the dispersion on a fabric or release paper. Powd. Sanwet
IM 1000 (starch-acrylic acid salt graft copolymer) (7 parts) was
dispersed in an adhesive soln. contg. styrene-isoprene-styrene
block copolymer 25, polyisobutylene 15, liq.
paraffin 25, Escorez 5300 (tackifier) 25, L-menthol 3, and n-hexane
340 parts, the dispersion was spread on a release paper, heated for
removal of n-hexane, and adhered with a vinyl chloride film to give
a water-absorbing plaster.
- IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6,
Polyethylenimine
(manuf. of plaster bases contg. polymer powders dispersed in
rubber adhesives and topical adhesive prepns. contg. drugs)
- RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)
- CM 1
- CRN 557-75-5
CMF C2 H4 O



- RN 9002-98-6 HCAPLUS
CN Aziridine, homopolymer (9CI) (CA INDEX NAME)
- CM 1

CRN 151-56-4
CMF C2 H5 N



- IC ICM A61K009-70
ICS A61K009-70; A61L015-58
- CC 63-6 (Pharmaceuticals)
- IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6,
Polyethylenimine 9003-01-4, Poly(acrylic acid) 9003-05-8,
Polyacrylamide 9003-39-8, Poly(vinylpyrrolidone) 9004-32-4
9004-62-0, Hydroxyethyl cellulose 9004-67-5, Methyl cellulose
9086-70-8, Sanwet IM 1000 25322-68-3 26299-60-5, Acrylic
acid-vinyl alcohol copolymer 28327-80-2D, Isobutylene-maleic acid
copolymer, salts
(manuf. of plaster bases contg. polymer powders dispersed in
rubber adhesives and topical adhesive prepns. contg. drugs)
- L27 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2002 ACS
1996:756202 Document No. 126:131974 Interpolymer complexes of a graft
copolymer with polyelectrolytes and equivalent blends of binary
homopolymer complexes. A comparative study of their stability and
thermodynamic parameters. Chatterjee, S. K.; Misra, Neeti
(Department Chemistry, Delhi University, Delhi, 110007, India).
Macromolecular Chemistry and Physics, 197(12), 4193-4206 (English)
1996. CODEN: MCHPES. ISSN: 1022-1352. Publisher: Huethig & Wepf.
- AB Interpolymer complexes of acrylamide/vinyl alc. graft copolymers
(AAM/VA) were prepd. with 2 typical polyelectrolytes, e.g.
poly(methacrylic acid) (PMA) and poly(ethylenimine) (PEI). The
equivalent blends of the same compn. as the graft copolymer
complexes were also prepd. by mixing stoichiometric portions of
binary homopolymer complexes. The stability const. (K), degree of
linkage (.theta.), and related thermodyn. parameters (e.g. std. free
energy change .DELTA.G0, std. enthalpy change .DELTA.H0, and std.
entropy change .DELTA.S0) were detd. for each system by using
Osada's method. The comparative study between graft copolymer
complexes and equiv. blends indicated a considerable difference in
these parameters. An interpretation of this discrepancy was sought
in the terms of copolymer effect, neighboring group influence, and
the nature of secondary binding forces upon interpolymer
complexation.
- IT 186380-33-6, Poly(vinyl alcohol)-polyethylenimine complex
(blends with polyacrylamide-polyethylenimine complex; stability
and thermodyn. parameters of interpolymer complexes of
polyelectrolytes with graft copolymers and equiv. binary
homopolymer blends)
- RN 186380-33-6 HCAPLUS

CN Ethenol, homopolymer, compd. with aziridine homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 9002-98-6

CMF (C2 H5 N)x

CCI PMS

CM 2

CRN 151-56-4

CMF C2 H5 N



CM 3

CRN 9002-89-5

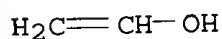
CMF (C2 H4 O)x

CCI PMS

CM 4

CRN 557-75-5

CMF C2 H4 O



CC 36-5 (Physical Properties of Synthetic High Polymers)
IT 186380-33-6, Poly(vinyl alcohol)-polyethylenimine complex
(blends with polyacrylamide-polyethylenimine complex; stability
and thermodyn. parameters of interpolymer complexes of
polyelectrolytes with graft copolymers and equiv. binary
homopolymer blends)

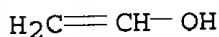
L27 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2002 ACS
1996:303996 Document No. 124:318171 Preparation and use of
poly(N-vinyl-epsilon-caprolactam) aqueous solutions. Kroker,
Joerg; Schneider, Reinhard; Schupp, Eberhard; Kerber, Michael (BASF
A.-G., Germany). Ger. Offen. DE 4434986 A1 19960404, 7 pp.
(German). CODEN: GWXXBX. APPLICATION: DE 1994-4434986 19940930.
AB The polymer is obtained by monomer polymn. in aq. soln. contg.
0.1-20% (on monomer) water-sol. synthetic or natural polymeric
protective colloid. The process is rapid and conducted without the

need for emulsifier and avoids the problem of thermoreversible monomer-polymer soly. The polymer solns. may be used for adhesives, lubricant or other additives, and opacifiers. Thus, aq. N-vinylcaprolactam (46% concn.) was polymd. in the presence of AIBN and 7.5% hydrolyzed poly(vinyl acetate) protective colloid to give a homogeneous product. Inhomogeneity was noted (even after >24 h addnl. stirring) when no protective colloid was used.

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6,
Polyethylenimine
(protective colloid in aq. polymn. of vinylcaprolactam)
RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5
CMF C2 H4 O



RN 9002-98-6 HCAPLUS
CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4
CMF C2 H5 N



IC ICM C08F126-06
ICS C08F002-10; D06M017-06; C10M149-10; C11D003-37; C09K009-02;
C09J139-04; A61K047-32
ICA C09K007-02; C09K017-20; C08F004-32; C08F004-40; C08J003-03;
A61K007-11; C02F001-54; A23L002-70; C12H001-00; C05G003-00
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 37, 38
IT 25322-68-3, Polyethylene glycol 106392-12-5, Ethylene
oxide-propylene oxide **block copolymer**
(catalyst adjunct in aq. polymn. of vinylcaprolactam using
protective colloid)
IT 9000-69-5, Pectin 9002-89-5, Poly(vinyl alcohol)
9002-98-6, Polyethylenimine 9003-05-8, Polyacrylamide
9003-20-7D, Poly(vinyl acetate), hydrolyzed 9003-39-8,
Poly(vinylpyrrolidone) 9004-32-4, Carboxymethyl cellulose sodium
salt 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl

cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, uses
9049-76-7, Hydroxypropyl starch 25014-12-4, Polymethacrylamide
25549-84-2, Poly(sodium acrylate)
(protective colloid in aq. polymn. of vinylcaprolactam)

L27 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2002 ACS
1995:996513 Document No. 124:58512 Microparticle-containing pressure
sensitive adhesive tape. Goetz, Richard J.; Pohl, Daniel P.; Brown,
Mary L. (Minnesota Mining and Mfg. Co., USA). PCT Int. Appl. WO
9527014 A1 19951012, 40 pp. DESIGNATED STATES: W: AM, AT, AU, BB,
BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE,
KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ,
PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA; RW: AT, BE, BF, BJ,
CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML,
MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2.
APPLICATION: WO 1995-US2314 19950224. PRIORITY: US 1994-222668
19940404.

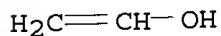
AB The title pressure sensitive adhesive tape employs a water-absorbent
backing, a microparticle-contg. pressure sensitive adhesive and a
water-dispersible component. The tapes are useful in bonding of
close fitting parts such as golf club shafts. A tape was prepd. by
coating a acrylic acid-1,6-hexanediol diacrylate-isooctyl
acrylate-polyethylene glycol monoacrylate copolymer
microparticle-sodium dodecylbenzene sulfonate mixt. adhesive on a
Teslin film.

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6
(water-dispersible component; microparticle-contg. pressure
sensitive adhesive tape)

RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5
CMF C2 H4 O



RN 9002-98-6 HCAPLUS
CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4
CMF C2 H5 N



IC ICM C09J007-02
 CC 38-3 (Plastics Fabrication and Uses)
 IT 57-09-0, Cetyltrimethylammonium bromide 2235-54-3, Ammonium lauryl
 sulfate 9002-89-5, Poly(vinyl alcohol) 9002-92-0,
 Polyoxyethylene lauryl ether 9002-98-6 9003-01-4,
 Poly(acrylic acid) 9003-05-8, Poly(acrylamide) 9003-09-2,
 Poly(vinyl methyl ether) 9003-39-8, Poly(N-vinylpyrrolidone)
 9004-81-3, Polyoxyethylene laurate 9004-95-9, Polyoxyethylene
 cetyl ether 9004-96-0, Polyoxyethylene oleate 9004-98-2,
 Polyoxyethylene oleyl ether 9011-16-9, Maleic anhydride-vinyl
 methyl ether copolymer 9016-45-9, Polyoxyethylene nonylphenyl
 ether 9063-89-2, Polyoxyethylene octylphenyl ether 25155-30-0,
 Sodium dodecylbenzenesulfonate 27176-87-0D, Dodecylbenzenesulfonic
 acid, metal salts 37318-79-9, Sorbitan oleate 62744-35-8,
 Poly(sodium styrenesulfonate) 106392-12-5, Ethylene
 oxide-propylene oxide **block copolymer**
 (water-dispersible component; microparticle-contg. pressure
 sensitive adhesive tape)

L27 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2002 ACS
 1995:958528 Document No. 124:31679 Process for making water-based
 latexes of diene-containing **block copolymers**.
 Daniel, Mervyn F.; Cox, Kenneth R. (Shell Oil Co., USA). U.S. US
 5461104 A 19951024, 7 pp. (English). CODEN: USXXAM. APPLICATION:
 US 1994-184629 19940121.

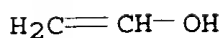
AB The latexes contg. polymer particles with size of <1 .mu.m are
 derived from conjugated dienes and vinylarom. hydrocarbons which may
 or may not contain polar functionality. A polymer cement useful for
 adhesives and coatings is made by dispersing the org. soln. of
block copolymers in an aq. phase contg. nonionic
 emulsifier having a no.-av. mol. wt. of <1600 and an HLB value of
 9.5-16 and a stabilizer which is a nonionic surfactant having a mol.
 wt. >1600.

IT 9002-89-5, Poly(vinyl alcohol) 9002-98-6
 (process for making water-based latexes of diene-contg.
block copolymers)

RN 9002-89-5 HCAPLUS
 CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5
 CMF C2 H4 O



RN 9002-98-6 HCAPLUS
 CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



IC ICM C08L053-02
 NCL 524505000
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 42
 IT Adhesives
 Coating materials
 Emulsifying agents
 Surfactants
 (process for making water-based latexes of diene-contg.
block copolymers)
 IT Siloxanes and Silicones, uses
 (surfactant/stabilizer; process for making water-based latexes of
 diene-contg. **block copolymers**)
 IT 9003-11-6, Ethylene oxide-propylene oxide copolymer
 (nonionic dispersants; process for making water-based latexes of
 diene-contg. **block copolymers**)
 IT 9002-86-2, PVC 9002-88-4, Polyethylene 9002-89-5,
 Poly(vinyl alcohol) 9002-98-6 9003-01-4, Acrylic acid
 polymer 9003-05-8, Acrylamide polymer 9003-07-0, Polypropylene
 9003-09-2, Poly(vinyl methyl ether) 9003-20-7, Poly(vinyl acetate)
 9003-39-8, Polyvinylpyrrolidone 9003-53-6, Polystyrene
 9011-14-7, PMMA 9016-00-6, Dimethyl siloxane 25014-41-9,
 Acrylonitrile polymer 25087-26-7, Methacrylic acid polymer
 25232-41-1, Poly(4-vinylpyridine) 25322-68-3, Ethylene oxide
 polymer 25322-69-4 25719-52-2, Lauryl methacrylate polymer
 26913-06-4, Poly[imino(1,2-ethanediyl)] 31900-57-9,
 Dimethylsilanediol polymer
 (process for making water-based latexes of diene-contg.
block copolymers)
 IT 9036-19-5, OP40
 (surfactant/stabilizer; process for making water-based latexes of
 diene-contg. **block copolymers**)
 IT 106107-54-4DP, Butadiene-styrene **block copolymer**
 , hydrogenated

(triblock; process for making water-based latexes of diene-contg.
block copolymers)

L27 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1995:867832 Document No. 123:266146 Drugs, vaccines and hormones in
polylactide coated microspheres. Modi, Pankaj (Can.). PCT Int.
Appl. WO 9522318 A1 19950824, 22 pp. DESIGNATED STATES: W: AM, AU,
BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KE, KG, KP, KR, KZ,
LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SI, SK,
TJ, TT, UA, UG, UZ, VN; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE,
DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN,
TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1995-CA74
19950214. PRIORITY: US 1994-197756 19940217; US 1994-197754
19940217.

AB A controlled release formulation for use with a variety of drugs,
vaccines or hormones are formed in microspherical form. The drug,
vaccine or hormone, e.g. bovine somatotropin, hepatitis vaccine, it
suspended in a polymer matrix. The polymer matrix is formed from at
least two water sol. biodegradable polymers, selected fro example
from starch, crosslinked starch, ficoll, polysucrose, polyvinyl
alc., gelatin, cellulose ethers and esters, sodium alginate,
polymaleic anhydride esters, polyorthoesters, polyethylenimine,
polyethylene glycol, methoxypolyethylene glycol, ethoxypolyethylene
glycol, polyethylene oxide, poly[1,3-bis(p-carboxyphenoxy)propane-co-
sebacic anhydride] N,N-diethylaminoacetate, or a **block**
copolymer of polyoxyethylene and polyoxypropylene. The
microspheres are coated with a (d,l-lactide-glycolide) copolymer.
The coating makes the microspheres more resistant to enzymic degrdn.

IT 9002-89-5, Polyvinyl alcohol 9002-98-6,
Polyethylenimine
(drugs, vaccines and hormones in polylactide coated microspheres)

RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O

$\text{H}_2\text{C}=\text{CH}-\text{OH}$

RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



IC ICM A61K009-16
ICS A61K009-50

CC 63-6 (Pharmaceuticals)

IT 9002-89-5, Polyvinyl alcohol 9002-98-6,
Polyethylenimine 9004-32-4, Sodium CM-cellulose 9004-35-7,
Cellulose acetate 9004-62-0, Hydroxyethyl cellulose 9004-64-2,
Hydroxypropyl cellulose 9004-65-3, HPMC 9004-74-4,
Methoxypolyethylene glycol 9005-25-8, Starch, biological studies
9005-38-3, Sodium alginate 9062-14-0, Hydroxypropyl ethyl
cellulose 24937-72-2D, Polymaleic anhydride, esters 25322-68-3,
Peg 25702-74-3, Ficoll 26780-50-7 27879-07-8,
Ethoxypolyethylene glycol 37353-59-6, Hydroxymethyl cellulose
66419-50-9, BST 106392-12-5, Polyoxyethylene-polyoxypropylene
block copolymer 127310-31-0
(drugs, vaccines and hormones in polylactide coated microspheres)

L27 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1995:638678 Document No. 123:65846 Biodegradable polymer microspheres
for controlled release of drugs or hormones. Modi, Pankaj (Can.).
U.S. US 5417982 A 19950523, 5 pp. (English). CODEN: USXXAM.
APPLICATION: US 1994-197756 19940217.

AB A controlled release formulation for use with a variety of drugs or
hormones are formed in microspherical form. The drug or hormone,
e.g. bovine somatotropin, is suspended in a polymer matrix. The
polymer matrix is formed from at least two highly water sol.
biodegradable polymers, selected for example from starch,
crosslinked starch, ficoll, polysucrose, polyvinyl alc., gelatin,
hydroxymethyl cellulose, hydroxyethyl cellulose, hydroxypropyl
cellulose, hydroxypropyl Et cellulose, hydroxypropyl Me cellulose,
sodium CM-cellulose, cellulose acetate, sodium alginate, polymaleic
anhydride esters, polyortho esters, polyethyleneimine, polyethylene
glycol, methoxypolyethylene glycol, ethoxypolyethylene glycol,
polyethylene oxide, 1,3 bis(p-carboxyphenoxy) propane-sebacic
anhydride copolymer, N,N-diethylaminoacetate, **block**
copolymers of polyoxyethylene and polyoxypropylene. The
microspheres are coated with a DL-lactide-glycolide copolymer. The
coating makes the microspheres more resistant to enzymic degrdn.

IT 9002-89-5, Polyvinyl alcohol 9002-98-6
(biodegradable **polymer** microspheres for controlled
release of drugs or hormones)

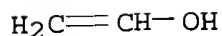
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9002-98-6 HCAPLUS
 CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4
 CMF C2 H5 N

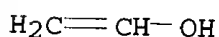


IC ICM A61K009-14
 NCL 424486000
 CC 63-6 (Pharmaceuticals)
 IT 110-16-7D, 2-Butenedioic acid (Z)-, esters, polymers
 9002-89-5, Polyvinyl alcohol 9002-98-6
 9004-10-8, Insulin, biological studies 9004-32-4, Sodium
 CM-cellulose 9004-35-7, Cellulose acetate 9004-62-0,
 Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose
 9004-65-3, Hydroxypropylmethyl cellulose 9004-74-4 9005-38-3,
 Sodium alginate 9062-14-0, Hydroxypropyl ethyl cellulose
 25322-68-3 25702-74-3, Ficoll 27879-07-8, Ethoxypolyethylene
 glycol 37353-59-6, Hydroxymethyl cellulose 61912-98-9,
 Insulin-like growth factor 106392-12-5, Polyoxyethylene-
 polyoxypropylene **block copolymer** 165125-94-0
 (biodegradable **polymer** microspheres for controlled
 release of drugs or hormones)

L27 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2002 ACS
 1994:55376 Document No. 120:55376 Polymer scale preventive agent and
 its use in a polymerization vessel. Shimizu, Toshihide; Watanabe,
 Mikio (Shin-Etsu Chemical Co., Ltd., Japan). Eur. Pat. Appl. EP
 540934 A1 19930512, 82 pp. DESIGNATED STATES: R: BE, DE, ES, FR,
 GB, GR, IT, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP
 1992-117937 19921020. PRIORITY: JP 1991-302294 19911021; JP
 1991-359427 19911227; JP 1991-359429 19911227; JP 1991-359430
 19911227; JP 1992-72910 19920224; JP 1992-72911 19920224; JP
 1992-177467 19920611.
 AB The agent, an alk. soln. of an arom. amine-quinone compd.
 condensate, forms a coating on the inner wall, etc. of a polymn.
 vessel for an ethylenic monomer; scale deposition of polymer is
 prevented and the polymer shows very few fish eyes and affords
 sheets with good whiteness. Thus, a scale prevention agent was
 prepd. from 1,8-diaminonaphthalene-p-benzoquinone condensate in

80:20 H₂O-MeOH at 0.2 wt% with ethylenediamine to pH 9.5 was applied to the inner parts of a polymn. vessel, which was used for aq. polymn. of vinyl chloride using peroxide catalyst. After 5 batches, the scale deposited on the reactor wall liq.-phase area and interface were 0 and 8 g/m², resp., and the no. of fisheyes on a polymer sheet were 7/100 cm².

IT 9002-89-5, Polyvinyl alcohol 9002-98-6
 (scale preventive agents contg., for coating polymn. vessels for ethylenic compds.)
 RN 9002-89-5 HCAPLUS
 CN Ethenol, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 557-75-5
 CMF C2 H4 O



RN 9002-98-6 HCAPLUS
 CN Aziridine, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 151-56-4
 CMF C2 H5 N



IC ICM C08F002-00
 CC 35-9 (Chemistry of Synthetic High Polymers)
 IT 62-53-3D, Benzenamine, reaction products with J acid and benzoquinone 65-49-6D, p-Aminosalicylic acid, reaction products with benzoquinone 81-16-3D, 2-Naphthylamine-1-sulfonic acid, reaction products with bromobenzoquinone 83-55-6D, 1-Amino-5-hydroxynaphthalene, reaction products with phenylenediamine and benzoquinone 83-72-7D, 2-Hydroxy-1,4-naphthoquinone, reaction products with aminodiphenylamine and aminobenzoic acid 83-72-7D, Lawsone, reaction products with diaminonaphthalene 87-02-5D, J Acid, reaction products with aniline and benzoquinone 87-02-5D, reaction products with phenylenediamine and benzoquinone 88-45-9D, 2,5-Diaminobenzenesulfonic acid, reaction products with benzoquinone 88-45-9D, 2,5-Diaminobenzenesulfonic acid, reaction products with diaminonaphthalene and and naphthoquinone 88-63-1D, 2,4-Diaminobenzenesulfonic acid, reaction products with

naphthoquinone 90-20-0D, reaction products with aminodiphenylamine
and benzoquinone 90-20-0D, H Acid, reaction products with
nitroaminophenol and toluquinone 90-51-7D, 2-Amino-8-naphthol-6-
sulfonic acid, reaction products with aniline and
hydroxynaphthoquinone 91-59-8D, .beta.-Naphthylamine, reaction
products with benzoquinone 95-55-6D, o-Aminophenol, reaction
products with benzoquinone 98-37-3D, reaction products with
benzoquinone 101-54-2D, 4-Aminodiphenylamine, reaction products
with benzoquinone 106-51-4D, p-Benzoquinone, reaction products
with diaminonaphthalene 107-15-3, 1,2-Ethanediamine, miscellaneous
108-45-2D, m-Phenylenediamine, reaction products with Lawsone
119-34-6D, 2-Nitro-4-aminophenol, reaction products with
diaminobenzoic acid and benzoquinone 121-57-3D,
4-Aminobenzenesulfonic acid, reaction products with naphthoquinone
121-88-0D, 5-Nitro-2-aminophenol, reaction products with H acid and
toluquinone 123-30-8D, p-Aminophenol, reaction products with
benzoquinone 130-15-4D, .alpha.-Naphthoquinone, reaction products
with naphthylamine 134-32-7D, .alpha.-Naphthylamine, reaction
products with benzoquinone 150-13-0D, p-Aminobenzoic acid,
reaction products with aminodiphenylamine and hydroxynaphthoquinone
479-27-6D, 1,8-Diaminonaphthalene, reaction products with Lawsone
479-27-6D, 1,8-Diaminonaphthalene, reaction products with
benzoquinone 481-39-0D, Juglone, reaction products with
naphthylamine 481-42-5D, Plumbagin, reaction products with
diaminobenzoic acid 524-42-5D, .beta.-Naphthoquinone, reaction
products with naphthylamine 527-17-3D, Duroquinone, reaction
products with diaminonaphthalene 534-85-0D, 2-Aminodiphenylamine,
reaction products with aminophenol and benzoquinone 553-97-9D,
p-Toluquinone, reaction products with aminophenol 583-63-1D,
o-Benzoquinone, reaction products with diaminonaphthalene
591-27-5D, m-Aminophenol, reaction products with Lawsone
591-27-5D, m-Aminophenol, reaction products with duroquinone
610-74-2D, 2,5-Diaminobenzoic acid, reaction products with
naphthoquinone 611-03-0D, reaction products with naphthoquinone
611-03-0D, 2,4-Diaminobenzoic acid, reaction products with
naphthylamine and Lawsone 619-05-6D, 3,4-Diaminobenzoic acid,
reaction products with Lawsone 771-97-1D, 2,3-Diaminonaphthalene,
reaction products with benzoquinone 945-30-2D,
2,5-Diaminoterephthalic acid, reaction products with
bromobenzoquinone 2243-62-1D, 1,5-Diaminonaphthalene, reaction
products with benzoquinone 2474-72-8D, Hydroxy-p-benzoquinone,
reaction products with diaminonaphthalene 2687-25-4D,
2,3-Diaminotoluene, reaction products with aminophenol and
benzoquinone 3958-82-5D, Bromo-p-benzoquinone, reaction products
with diaminoterephthalic acid 3958-82-5D, Bromo-p-benzoquinone,
reaction products with naphthylaminesulfonic acid 4919-43-1D,
reaction products with naphthylamine and benzoquinone 7631-86-9,
Silica, miscellaneous 9000-69-5, Pectins 9002-89-5,
Polyvinyl alcohol 9002-98-6 9003-05-8D, Polyacrylamide,
water-sol. 9003-39-8, Polyvinylpyrrolidone 9004-32-4,
Carboxymethyl cellulose 9004-62-0, Hydroxyethyl cellulose
33890-03-8D, 4-Aminoisophthalic acid, reaction products with

aminodiphenylamine and naphthoquinone 38160-63-3D,
4-Hydroxyanthranilic acid, reaction products with aminodiphenylamine
and toluquinone 65237-06-1D, reaction products with Lawsone
88246-87-1D, reaction products with duroquinone 152406-23-0D,
reaction products with benzoquinone 152406-24-1D, reaction
products with naphthoquinone

(scale preventive agents contg., for coating polymn. vessels for
ethylenic compds.)

IT 106107-54-4P, Butadiene-styrene **block copolymer**
(triblock, prepn. of, scale prevention in, arom. amine-quinone
condensate for)

L27 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1992:657973 Document No. 117:257973 Antidandruff shampoos containing
1-hydroxy-2-pyridinethione metal salts. Cardin, Caroline Winyard;
Davis, Joyce Ingram; Hart, Judi Lynn; Schmidt, Diane Grob (Procter
and Gamble Co., USA). PCT Int. Appl. WO 9214440 A1 19920903, 29 pp.
DESIGNATED STATES: W: AU, FI; RW: AT, BE, CH, DE, DK, ES, FR, GB,
GR, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO
1991-US994 19910215.

AB An antidandruff shampoo in lotion comprises, (1) a synthetic
surfactant, (2) 1-hydroxy-2-pyridinethione metal salt in platelet
form with a mean particle size 2-15 .mu.m, (3) a synergizer selected
from polyethylene glycol, polypropylene glycol, polyethylene
glycol-polypropylene glycol **block copolymer**,
polyethyleneimine, ethoxylated nonyl phenol, polyethylene oxide
fatty glycerides, polyethylene oxide carbohydrates, ethoxylated
straight-chain alcs., and mixts. thereof, (4) a suspending agent,
and (5) water. For example, an antidandruff shampoo contained
ammonium laureth sulfate 14.94, ammonium lauryl sulfate 3.15,
ethylene glycol distearate 3.00, coconut monoethanolamide 2.58, PEG
(mol. wt. 546) 2.00, silicone gum 0.5, dimethicone fluid 0.5, 2Zn
pyrithione (particle size 7.7 .mu.m) 1.0, cetyl alc. 0.42, stearyl
alc. 0.18, and color, perfume, preservative, pH-control agent, and
water q.s. to 100 %.

IT 9002-89-5, Polyvinyl alcohol 9002-98-6
(antidandruff shampoos contg. zinc pyrithione and)

RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O

$\text{H}_2\text{C}=\text{CH}-\text{OH}$

RN 9002-98-6 HCAPLUS

CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



IC ICM A61K007-075

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

IT 2235-54-3, Ammonium lauryl sulfate 7488-56-4, Selenium disulfide
7647-14-5, Sodium chloride, miscellaneous 7664-93-9D, Sulfuric
acid, alkyl esters 9002-89-5, Polyvinyl alcohol
9002-98-6 9005-64-5, Polysorbate 20 9016-45-9
9062-90-2 12125-02-9, Ammonium chloride, miscellaneous
25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol
26447-10-9, Ammonium xylene sulfonate 31694-55-0D, Polyoxyethylene
glycerol, triesters with fatty acids 32612-48-9, Ammonium laureth
sulfate 68890-66-4, Piroctone olamine 106392-12-5, Ethylene
glycol-propylene glycol **block copolymer**
(antidandruff shampoos contg. zinc pyrithione and)

L27 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1992:130644 Document No. 116:130644 Immobilization of lipase on
poly(vinyl alcohol)/polyethyleneimine copolymer and synthesis of
esters catalyzed by lipase. Ikeda, Isao; Sato, Issei; Suzuki,
Kimihiro (Eng. Coll., Fukui Univ., Fukui, Japan). Sen'i Kogyo
Kenkyu Kyokai Hokoku, 1, 22-9 (Japanese) 1991. CODEN: SKKIE8.
ISSN: 0916-8931.

AB Bromoacetalized poly(vinyl alc.) is coupled with poly(ethylenimine),
and the resulting graft copolymer is then crosslinked with
glutaraldehyde; lipase OF is immobilized on the crosslinked
copolymer. The activity of the immobilized lipase is 1000 units/g
irresp. of the poly(ethylenimine) mol. wt. The prepn. of glycerides
from oleic acid and glycerol using the polymer-bound lipase is
examd. The degree of synthesis of glyceride increases with
increasing glycerol concn. Esters of ethylene glycol and
1,3-butanediol are also prepd.

IT 108166-37-6DP, reaction products with glutaraldehyde and
lipase OF

(prepn. and use of, as esterification catalysts)

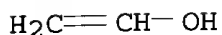
RN 108166-37-6 HCAPLUS

CN Ethenol, polymer with aziridine, graft (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

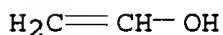
CRN 151-56-4

CMF C2 H5 N



- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 16
- IT 111-30-8DP, Glutaraldehyde, reaction products with lipase OF and ethyleneimine-vinyl alc. graft copolymers 9001-62-1DP, Lipase OF, reaction products with glutaraldehyde and ethyleneimine-vinyl alc. graft copolymers 108166-37-6DP, reaction products with glutaraldehyde and lipase OF
(prepn. and use of, as esterification catalysts)
- L27 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2002 ACS
1990:159877 Document No. 112:159877 Manufacture of highly concentrated dispersions of hydrous gel powders. Shimokawa, Wataru; Fukumori, Katsuaki; Kenjo, Takuya (Hoechst Gosei Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01297429 A2 19891130 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-125004 19880524.
- AB The title dispersions are manufd. by dispersing 70-900 parts 1-40% aq. solns. of water-based gel-forming acetoacetylated poly(vinyl alc.), acetoacetylated cellulose derivs., poly(vinyl alc.), isobutylene-maleic anhydride copolymers, or their derivs. into 100 parts of water-immiscible solvent in the presence of an oil-sol. dispersion stabilizer to form water-in-oil drops with particle size 1-2000 .mu.m and crosslinking the polymers in the drops with crosslinking agents. Thus, a 70:30 mixt. of an aq. soln. contg. 4.1 mol% acetoacetylated hydroxyethylcellulose (as a 2% aq. soln.) 80, 0.2% aq. NaOH 3, 40% aq. glyoxal 2, and H2O 15 parts and a soln. contg. 95 parts xylene and 5 parts ethylcellulose with 45% ethoxyl content was stirred at 200 rpm for 3 h, then left at room temp. for 24 h to give a dispersion with viscosity 1900 cP-s contg. 70% gel particles with diam. 100-1000 .mu.m and water content .apprx.97.6%. The dispersion was stable and did not sep. or coagulate when kept at ambient temp. for 3 mo.
- IT 9002-89-5DP, Poly(vinyl alcohol), acetoacetylated, crosslinked 9002-98-6DP, polymers with acetoacetylated poly(vinyl alc.)
(prepn. of, hydrous microgels, in aq. dispersions)

RN 9002-89-5 HCAPLUS
 CN Ethenol, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 557-75-5
 CMF C2 H4 O



RN 9002-98-6 HCAPLUS
 CN Aziridine, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 151-56-4
 CMF C2 H5 N



IC ICM C08J003-02
 ICS C08J003-24
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 35
 IT Fatty acids, **polymers**
 (polycondensation products, **block polymers**
 with polyhydric alcs., dispersion stabilizers, in manuf. of aq.
 dispersions of crosslinked hydrous polymer microgels)
 IT Alcohols, **polymers**
 (polyhydric, **block polymers** with fatty acid
 polycondensation products, dispersion stabilizers, in manuf. of
 aq. dispersions of crosslinked hydrous polymer microgels)
 IT 107-22-2DP, Glyoxal, polymers with acetoacetylated
 hydroxyethylcellulose or poly(vinyl alc.) 111-30-8DP,
 Glutaraldehyde, polymers with acetoacetylated poly(vinyl alc.)
 112-57-2DP, Tetraethylenepentamine, polymers with imidized
 isobutylene-maleic anhydride copolymers **9002-89-5DP**,
 Poly(vinyl alcohol), acetoacetylated, crosslinked
9002-98-6DP, polymers with acetoacetylated poly(vinyl alc.)
 9004-62-0DP, Hydroxyethylcellulose, acetoacetylated, polymers with
 glyoxal 26426-80-2DP, Isobutylene-maleic anhydride copolymer,
 imidized with ammonia, polymers with tetraethylenepentamine
 (prepn. of, hydrous microgels, in aq. dispersions)

L27 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2002 ACS
 1988:116379 Document No. 108:116379 Recovery of noble metals from

spent catalysts or scrap. Shirasaka, Akihisa; Kawanaka, Tomoichi; Horie, Hiroshi (Nichibi Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62238337 A2 19871019 Showa, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-80254 19860409.

AB Pd, Pt, Au, and/or Rh are recovered from spent catalysts or scrap by leaching, pptn., and absorption on ion-exchange fibers. The feed is dissolved with a strong or mixed acid and then reduced to ppt. precious metals. A dil. soln. is contacted with ion-exchange fibers from poly(vinyl alc.) having amine groups, and the absorbed metals are eluted with HCl contg. thiourea. Thus, alloy scrap was dissolved in aqua regia, and reduced with NH₃ or HCl. The resulting dil. soln. (pH 0.01) was passed through a fiber column of polyethyleneimine-poly(vinyl alc.) copolymer crosslinked with ethylene glycol diglyceryl ether. The absorbed metals were eluted with a mixt. of 0.1 N HCl and 0.1M thiourea, resulting in 10-fold concn. of the metals.

IT 111458-55-0D, Polyethyleneimine-poly(vinyl alcohol) copolymer, crosslinked with ethylene glycol diglyceryl ether 113277-81-9D, 3-Chloro-2-hydroxypropyltrimethylammonium chloride-polyethyleneimine-poly(vinyl alcohol) copolymer, crosslinked with ethylene glycol diglyceryl ether (fibers, for sorption of noble metals)

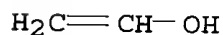
RN 111458-55-0 HCAPLUS

CN Ethenol, polymer with aziridine (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

CRN 151-56-4

CMF C2 H5 N

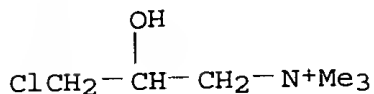


RN 113277-81-9 HCAPLUS

CN 1-Propanaminium, 3-chloro-2-hydroxy-N,N,N-trimethyl-, chloride, polymer with aziridine and ethenol (9CI) (CA INDEX NAME)

CM 1

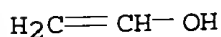
CRN 3327-22-8
CMF C6 H15 Cl N O . Cl



● Cl⁻

CM 2

CRN 557-75-5
CMF C2 H4 O



CM 3

CRN 151-56-4
CMF C2 H5 N



IC ICM C22B011-04

CC 54-2 (Extractive Metallurgy)

Section cross-reference(s): 38, 67

IT 111458-55-0D, Polyethyleneimine-poly(vinyl alcohol) copolymer, crosslinked with ethylene glycol diglyceryl ether
113277-81-9D, 3-Chloro-2-hydroxypropyltrimethylammonium chloride-polyethyleneimine-poly(vinyl alcohol) copolymer, crosslinked with ethylene glycol diglyceryl ether (fibers, for sorption of noble metals)

L27 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1987:618803 Document No. 107:218803 Manufacture of anion-exchanging fibers. Shirasaka, Akihisa; Uchiumi, Tadayoshi; Sugishita, Takaaki; Konishi, Osamu (Nichibi Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 62184113 A2 19870812 Showa, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1985-176806 19850813.

AB Chelatable anion-exchanging synthetic fibers are prep'd. by dry spinning liqs. contg. poly(vinyl alc.) (I) with degree of sapon. .gtoreq.98 mol% and polyethyleneimine (II) at 50-95:5-50 wt. ratio and then heat-treating the fibers at 180-240.degree.. Thus, an aq. compn. contg. 38% (solids) 75:25 mixt. of I and II (mol. wt. 26,000) was dry spun, drawn 350%, and heat-treated 30 s at 240.degree. to give fibers with the amt. of II dissoln. 30.5% after immersion in H2O for 24 h, compared with 86.3% for fibers heat-treated at 160.degree..

IT 111458-55-0

(fiber, as anion exchangers, manuf. of)

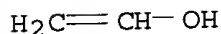
RN 111458-55-0 HCAPLUS

CN Ethenol, polymer with aziridine (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

CRN 151-56-4

CMF C2 H5 N



IC ICM D01F006-50

ICS C08J005-20; D01F006-94

CC 38-2 (Plastics Fabrication and Uses)

Section cross-reference(s): 40

IT 111458-55-0

(fiber, as anion exchangers, manuf. of)

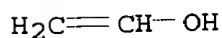
L27 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1987:196905 Document No. 106:196905 Synthesis and functionality of polyvinylalcohol-polyethyleneimine copolymer. Ikeda, Isao; Yamauchi, Hajime; Suzuki, Kimihiro (Fac. Eng., Fukui Univ., Fukui, 910, Japan). Sen'i Gakkaishi, 43(3), 166-70 (English) 1987. CODEN: SENGAS. ISSN: 0037-9875.

AB Poly(vinyl alc.) (I) was acetalized with I chloroacetaldehyde in homogeneous and heterogeneous states. Then the chloroacetalized I was reacted with polyethylenimine (II) to form the graft copolymer [108166-37-6]. The II content of the copolymer increased

with increasing degree of chloroacetalization of I and mol. wt. of II. The copolymer was used as a chelating resin of heavy metal ions and a supporting material for immobilization of .alpha.-amylase [9000-90-2].

IT 108166-37-6P
 (prepn. of, as chelation agent and enzyme immobilization agent)
 RN 108166-37-6 HCAPLUS
 CN Ethenol, polymer with aziridine, graft (9CI) (CA INDEX NAME)
 CM 1
 CRN 557-75-5
 CMF C2 H4 O



CM 2
 CRN 151-56-4
 CMF C2 H5 N



CC 35-8 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 38
 IT 108166-37-6P
 (prepn. of, as chelation agent and enzyme immobilization agent)
 L27 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2002 ACS
 1985:496285 Document No. 103:96285 Photographic paper support. Von Meer, Walter (Schoeller, Felix, Jr., G.m.b.H. und Co. K.-G., Fed. Rep. Ger.). Ger. Offen. DE 3328463 A1 19850221, 18 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1983-3328463 19830806.
 AB Water-resistant, synthetic resin-coated paper supports for photog. materials are described. The supports, which show decreased developer penetration, are composed of a water-repelling paper sized with a compn. contg. a hydrophobic sizing agent at 0.2-2 wt.%, a cationic solid retention and binding agent at 1.5-fold the concn. of hydrophobic sizing agent, and a polysaccharide phosphate or sulfate at the same or greater concn. than 0.5-fold the concn. of the hydrophobic sizing agent. Thus, to a mixt. of a hardwood sulfate pulp 50 and a softwood sulfite pulp 50% were added a C15-17 alkylketene dimer (in the form of an aq. emulsion) 0.5, a polyamide-polyamine-epichlorohydrin emulsion 1, a cationic polyacrylamide 0.2, and starch phosphate 2.0 wt.%. The pulp was

then processed into a paper (160 g/m²), surface-sized with an aq. soln. contg. oxidized starch 5, NaCl 2, and optical brightener 0.2 wt.%, smoothed, coated with polyethylene on both sides, and run through an automatic color processor to show developer penetration of 0.5 mm.

IT 29564-48-5

(photog. paper supports sized with compns. contg., for decreased developer penetration)

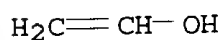
RN 29564-48-5 HCAPLUS

CN Ethenol, polymer with aziridine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

CRN 151-56-4

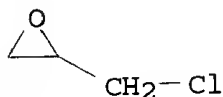
CMF C2 H5 N



CM 3

CRN 106-89-8

CMF C3 H5 Cl O



IC ICM G03C001-87

ICS D21H005-00; D21H003-02; D21H003-20; D21H003-80

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 57-11-4D, epoxidized 106-89-8D, reaction products with polyamide-polyamines 108-30-5D, alkyl derivs. 674-82-8D, alkyl

derivs. 1302-42-7 1317-70-0 9000-07-1 9000-30-0D, cationic
9002-98-6 9003-05-8D, cationic 9005-22-5 9005-25-8D, cationic
9011-18-1 9012-76-4 11078-30-1D, cationic 11097-99-7
11120-02-8 25447-83-0 **29564-48-5** 33345-53-8
70664-93-6D, chlorinated 72187-43-0 78615-64-2
(photog. paper supports sized with compns. contg., for decreased
developer penetration)

L27 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1983:127847 Document No. 98:127847 Improvement of aqueous resin
emulsions. (Mitsubishi Petrochemical Co., Ltd., Japan). Jpn. Kokai
Tokkyo Koho JP 57147549 A2 19820911 Showa, 9 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1981-31227 19810306.

AB Aq. resin emulsions having good resistance to flowing water before
hardening contain 0.05-5 parts (based on 100 parts emulsion solids)
ordinary-temp. water-curable blocked isocyanates and 0.01-5 parts
water-sol. org. amines. Thus, a sealing compn. contg. a 60%
(solids) aq. poly(vinyl acetate) emulsion 20, a 50% (solids) aq.
ethylene-vinyl acetate copolymer [24937-78-8] emulsion 30, and
CaCO₃ 50 parts was mixed with 0.5% (based on the emulsion solids)
imidazole-blocked ethylene oxide-propylene oxide-trimethylolpropane
adduct-TDI prepolymer and 0.5% polyethylenimine [9002-98-6
, coated on slate, and sprayed with a shower to wash away 4 g
sealing compn., compared with 97 g for a sealing compn. contg. 0.03%
blocked urethane prepolymer.

IT 9002-98-6
(sealing compns. contg. vinyl acetate resin and
blocked urethane prepolymer in, aq., water-resistant)

RN 9002-98-6 HCAPLUS
CN Aziridine, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 151-56-4

CMF C2 H5 N



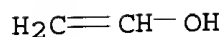
IT 9002-89-5
(sealing compns., aq., contg. polypropylene and blocked urethane
prepolymer and amine, water-resistant)

RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



IC C08L101-00
ICA C09D003-48; C09K003-10
ICI C08L101-00, C08L075-04
CC 42-11 (Coatings, Inks, and Related Products)
IT Sealing compositions
(vinyl acetate **polymers**, aq., contg. **blocked**
urethane prepolymer and amines, water-resistant)
IT 9002-98-6 70178-59-5
(sealing compns. contg. vinyl acetate **resin** and
blocked urethane prepolymer in, aq., water-resistant)
IT 9003-20-7
(sealing compns., aq., contg. ethylene-vinyl acetate
copolymer and **blocked** urethane prepolymer and
amines, water-resistant)
IT 9002-89-5
(sealing compns., aq., contg. polypropylene and blocked urethane
prepolymer and amine, water-resistant)

L27 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2002 ACS
1977:30513 Document No. 86:30513 Cocrosslinking water soluble
polymers. Assarsson, Per G.; King, Paul A. (Union Carbide Corp.,
USA). U.S. US 3993553 19761123, 7 pp. Continuation-in-part of U.S.
3,898,143. (English). CODEN: USXXAM. APPLICATION: US 1975-592094
19750630.

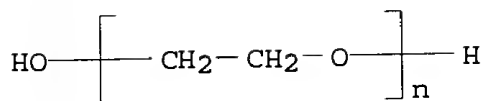
AB Poly(ethylene oxide) (I) and .gtoreq.1 other water-sol. polymer are
crosslinked by exposing aq. solns. of the polymers to high-energy
radiation to form insol., adsorbent hydrophilic gels. Thus, a mixt.
of 20 g of 4% I and 11 g of 2% poly(4-vinyl-n-butylpyridinium
bromide) was adjusted to pH 4.9 and irradiated with 1 MeV to 0.7
mrad to yield a gel having gel capacity in H2O after 24 h 960 g
H2O/g solid. Similarly prepd. were 11 other I copolymers.
IT 61577-26-2

(absorbents, for disposable articles)

RN 61577-26-2 HCAPLUS
CN Ethenol, polymer with aziridine and .alpha.-hydro-.omega.-
hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

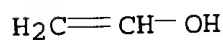
CRN 25322-68-3
CMF (C2 H4 O)n H2 O
CCI PMS



CM 2

CRN 557-75-5

CMF C2 H4 O



CM 3

CRN 151-56-4

CMF C2 H5 N



IC C08D001-00

NCL 204159120

CC 36-3 (Plastics Manufacture and Processing)

IT 53879-43-9 61577-13-7 61577-18-2 61577-19-3 61577-20-6

61577-21-7 61577-22-8 61577-23-9 61577-24-0 61577-25-1

61577-26-2 62239-74-1

(absorbents, for disposable articles)

L27 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2002 ACS

1968:4136 Document No. 68:4136 Poly(vinyl alcohol)-alkylenimine-epichlorohydrin condensation product and formation of cellulose webs. Lagally, Paul; Brook, John W. (Chemirad Corp.). U.S. US 3348997 19671024, 4 pp. (English). CODEN: USXXAM. APPLICATION: US 19631231.

AB The title condensation product, where the alkylenimine is polyethylenimine, is added to paper pulp to form a paper with excellent wet strength. Thus, 730 parts of a 4% polyethylenimine soln. was cooled below 10.degree. and 63 parts epichlorohydrin was added under agitation. The mixt. reacted for .apprx.2 hrs. The temp. was raised to 50-2.degree. and the reaction continued another 2 hrs. The temp. was maintained at .apprx.50.degree. and 81 parts of a 10% aq. poly(vinyl alc.) (Colton FH-400) was added with stirring. Stirring was continued .apprx.1 hr., when the pH was 6.5. The soln. was cooled to room temp. and its pH adjusted to .apprx.5.0

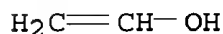
with a 10% HCl soln. The mole ratio of poly(vinyl alc.) to polyethylenimine to epichlorohydrin was 1:4:4. The product was added to paper pulp and handsheets were formed. The product at 0.5% concn. gave 2.72 lb./in. dry tensile strength and 0.39 lb./in. wet tensile strength compared with 2.09 and 0.06, resp., for the control (no condensation product).

IT 29564-48-5, uses and miscellaneous
(paper contg., tensile strength of, sizing in relation to)
RN 29564-48-5 HCAPLUS
CN Ethenol, polymer with aziridine and (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



CM 2

CRN 151-56-4

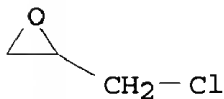
CMF C2 H5 N



CM 3

CRN 106-89-8

CMF C3 H5 Cl O



NCL 162164000

CC 43 (Cellulose, Lignin, Paper, and Other Wood Products)

IT 29564-48-5, uses and miscellaneous
(paper contg., tensile strength of, sizing in relation to)